

Recognizing the Signs of Stunting Problems and Solutions

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[Editor's Note: It is an unfortunate circumstance of life that in nearly every city of the world one can find the common street cur, skinny and skulking, nosing about for the slightest scrap of food of any sort whatever. Worse yet, there are scattered about the world many emaciated and ill-nourished children, ragamuffins with overly large heads, pencil skinny arms and legs, and frames in which one can count all the bones.

Alas, starving dogs and children are such a worldwide problem that the mind is staggered and no solutions seem to be at hand.

But there is a similar problem closer to home. And, tragic though it is, it is minor enough that we aviculturists really can fix it.

Eb Cravens wrote the following article to illustrate the avicultural problem and suggest some solutions, and it is his voice in the first person singular. Dale R. Thompson has contributed some technical input. S. Dingle, Ed.]

I was invited to speak at a large bird mart recently. During the two-day affair I was privileged to meet with many wonderful pet owners and hobby breeders. But I also saw firsthand a number of small-bodied pet psittacines. Many of these were incubator-hatched chicks fed from day one, macaws being the most common.

At the bird mart I also discovered a large-scale breeder with three 14-day old Amazon chicks with bright red skin, protruding backbones and toothpick wings and legs. He said they were on 2-10cc feedings every two hours with a pipette. Though I tried to politely explain the birds were not getting enough calories to grow plump and healthy, this breeder was not particularly receptive to instruction or perceived criticism. I have little hope for those chicks.... Oh, they may well survive all right. Psittacines are excellent survivors. Any experienced breeder knows that. But they will not flourish.

The redness in the skin, the protruding back bone and toothpick wings and feet are very early stunting signs that rise from not giving enough food, period! The thin wings and feet are from not having enough fluid in

the total body. A protruding backbone should be an immediate warning that something is not right. These are signs the baby is not getting enough food. The redness is from a malnourished baby that is kept in a brooder that is too hot. Keeping a small baby parrot in too hot an environment rapidly dehydrates the baby, resulting in its being bright red. A normal baby should be plump and when you pinch its skin, the skin will smooth back into place when you let go. The skin of a wrinkled, red baby does not spring back to normal. This type of baby needs more fluids along with more calories.

Other signs of stunting are the large, bulbous, oversized-looking head of a baby. This can especially be seen in

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macaws whether it is at seven days or seven weeks. A very young macaw will also show a bulbous protrusion at its cere or just above the upper mandible. In serious cases there is actually a depression or saddle appearance between this knob on its nose and the cranium. Around the six to eight week period of time, the feathers do not appear to grow correctly on the top of the head of a stunted macaw. The newly-bloomed feathers often appear as a "cow-lick" on the top of its head. These new feathers may not all go in the same direction, or do not have the smooth look of the head feathers of a correctly-fed young

macaw.

This same month, back at home, a good friend and fellow breeder purchased an incubator and pulled his cockatoo and macaw eggs for incubation, since the parents had not yet been taught to care for their clutches.

Ten days after he succeeded in hatching a Blue and Gold Macaw and a Moluccan Cockatoo, I drove up to visit him and to see the chicks. Both were underfed, undersized and one had developed curved-in toes on its feet. These were signs of malnutrition and stunting.

I spent the next few hours instructing and showing this hobbyist professional handfeeding techniques, correct formula thickness, required amounts, time schedules, etc.

Stunting one's birds comes from lack of experience in proper handfeeding techniques. The three main mechanical reasons for early stunting are:

- Not feeding enough formula per feeding. The crop should be full.
- Feeding too thin a formula. The parents feed food that is very thick, almost whole.
- Not feeding enough times in a day. Birds within the first week can often be fed 7 to 9 times a day. Too often breeders reduce the feeding times to three per day much too early in the young chick's life.

This well intentioned and innocent breeder had absolutely no idea the damage was doing to his beloved birds. Happily, the problems were caught early enough that the two baby parrots recouped the early poor weight gains and developed in a most excellent manner.

With the help of published weight charts (Aviculture Institute - 19985/'86 and Joanne Abramson's *The Large Macaws* - 1996) and a daily scale record, this aviculturist began to learn how to keep his chicks on an optimum growth curve.

The tremendous amount of written material about incubation procedures and neonate husbandry has done worlds of good for captive psittacine breeding. So many fortunate baby parrots are correctly hatched and raised today—chicks that would not have survived using the predominant meth-

ods of 15 years ago.

The difficulties arise when novice or totally inexperienced bird breeders decide that an incubator is the solution to their problems of chicks not surviving with their parents (often YOUNG parents who also need to learn what it means to tend a clutch). A man called me the other day and expressed chagrin at not being able to successfully raise babies with his Sun Conure pair. His hope was to purchase an incubator and hatch and feed the young from this, his only pair of "expensive birds." I counseled him *not* to buy the incubator—nighttime feeding every hour, potential power failures and vet bills could change his avicultural life. I mean, if a breeder has trouble getting the prolific and devoted pair of Sun Conures to hatch their own eggs, there is really something wrong.

Probably the most prevalent mistake made by the impatient beginner is to forgo daily weight-ins and the use of record charts. It is not unusual for a birdkeeper who has raised a Blue and Gold or Green-winged Macaw to assume they have the expertise to raise a Hyacinthine Macaw. This is precisely why one sees so many stunted day-one handfed Hyacinthine Macaw pets on the market these days. Huge head, huge feet, small chest and muscular build. If one feeds and weans a Hyacinthine as they would a Blue and Gold Macaw, that is a likely outcome. The best Hyacinthine formulas are nutritionally different.

Even though I had fed dozens of Scarlet, Blue and Gold, and Green-winged Macaws before I (and Darlene Parker, of Feathered Friends Pet Store in New Mexico) committed to the first baby Hyacinthine chick we nevertheless had phone numbers of four expert Hyacinthine aviculturists for ready consultation. And did we use them! Baby "Huey" turned out huge, beautiful, friendly and able to fly; but it was the advice and help we received that made the difference.

A good rule of thumb is: *If you have not raised a baby of a certain species of psittacine, then when the time comes for you to feed one, ask for help and advice from another breeder experienced with that species.*

In my experience, some species—



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Amboina Kings, Princess of Wales Parakeets, and the *Neophemas*, for example—grow fast and process a full crop quickly and they display fledging activities weeks before the slower-growing Amazons and cockatoos. To keep these fast growing birds full around the clock means setting the alarm and getting up every night—sometimes at five hour intervals.

Over a six week period of hand-feeding strictly by the clock (rather than the fullness of the crop) the food deficiency can result in birds that are 10-15 % undersized. I have been hand raising Princess Parakeets for over five years and have yet to get eight hours of unbroken sleep at night. I learned that the only way my handfed babies would match the weaning size and

formula on top of formula already in the bottom 10% of the crop needs to be extra careful in hygiene practices.

Mistakes with store-bought baby formula can cause stunting. There are many novice handfeeders who mix their gruel *too thin*. It fills the bird's crop but does not provide adequate nourishment.

Formulas should be mixed as thick as can be slowly drawn up into a syringe—so it pours off of a spoon thickly but not in globs. Poorly mixed baby gruel can also cause growth problems because it dries out a baby and becomes indigestible. Any chick droppings that show grainy undigested substance are suspect. I always add spirulina to baby food ("salting" amounts only). Fresh papaya pulp or

Where green juice is not available, substitute spirulina.

So, it can be seen that stunting problems in handfed psittacines may be traced to many different causes. Guidelines which best avoid these failings are:

- Train your breeding pairs to hatch and feed their own chicks at least 17-21 days—longer, if possible, for the final clutch of the year.

- Concentrate your handfeeding in youngest chicks to keep crop "empty down-time" out of the equation, carefully feeding clean food on top of 10% full crop when necessary.

- Study and learn the wild parrot weaning/fledging periods for the species you keep, so that you neither force early weaning or delay it. Species that fledge quickly need more nutritional input round the clock up to weaning.

- Get help when taking on a new species. The finest aviculturists share their expertise with conscientious beginners. Every time I take on a new species, I am again a beginner.

- Please think twice before you commit your hens' eggs to an incubator. Young mothers *need time* to learn to get it right. Be patient and prepare for the future.

It is my heartfelt belief that the epitome of avicultural accomplishment is taking an unrelated pair of domestically raised psittacines and teaching them to eventually raise one or two of their own chicks to fledging.

Every expert aviculturist I have ever spoken to agreed that handfed chicks left with the parents for as long as possible get a better start in their healthy lives. Three to four weeks with the mother for Sun Conures or Eclectus virtually assures there will be no stunting, providing the parents are properly fed with soft foods and easy-to-regurgitate nourishment.

So let us all spread the word. Stunting *can* be prevented. Although we may not know how to feed all the stray dogs in the world, nor can we ensure all of the world's unfortunate children a square meal, there is nothing whatever to prevent us from feeding fully and nutritionally the baby birds in our personal care. ➤

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weight of the parent-reared birds was for me to get up during the night and pack their crops before they emptied.

If an aviculturist absolutely must have an eight or ten-hour break in the feeding routine for chicks who need to be filled more often, the best procedure is to anticipate the long night, etc. and during the daytime hours feed the birds every five to six hours, keeping them full and essentially adding one feeding to the daytime schedule. Chicks treated thusly will normally be less hungry at night. The amount of caloric intake per day is therefore closer to correct—it is merely weighted toward the daylight hours. The next morning, such babies will usually digest their first A.M. feeding *very* quickly and will need to be fed again three to four hours later.

All such methods are aimed at mimicking the behavior of wild parrots who will always keep their chicks full of food—as long as the food supply is available. It goes without saying that any handfeeder who feeds fresh, clean

fresh mashed apple also inject some live enzymes into chicks, aiding digestion and preventing babies from becoming lethargic from too-processed a diet.

Psittacine chicks in their first seven to 10 days of development usually show a somewhat slower growth curve, their bodies have not "taken off" on the tremendous weight gains apparent at 17 days and later. It stands to reason that the nourishment given a chick is being used for essential internal growth, heart, lungs, kidneys, eyes, etc.

Accordingly, stunting during this day one to day 14 period is not always noticeable. Yet early sufficient nutrition is critical to the long-term health of a parrot. It is not just happenstance that studies have shown wild parrots feed an extremely *green* regurgitation to their just-hatched brood. Amazon, conure, and parakeet pairs here always seek out live greens—celery, buds, sprouts, fresh bark, and the like—for their newly hatched chicks.